



Field Van, Inc.
Operation Manual

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INTRODUCTION

Congratulations and thank you for joining the Field Van family!

It is important that you review this manual prior to your first journey to understand the operations and features of the vehicle. Please feel free to reach out to our team if there are any questions that are not addressed in the manual.

ABOUT THIS MANUAL

This manual is designed to assist you in the proper operation and care of the van and the equipment installed.

For your own safety and to ensure the proper maintenance and lifespan of your vehicle, please read and follow the operating instructions and warning notices in this manual carefully. We recommend that you familiarize yourself with your vehicle using this manual as well as your Vehicle manufacturer's owner's manual.

Disregarding them may result in damage to the van, the surrounding environment or in personal injury.

Some of the descriptions in this manual are of a general nature. Some features shown or described in this manual may be optional or unavailable on your van. Due to our process of continual improvement, it is possible that information on recent equipment changes may not be included.

The instructions included in this manual are intended as a guide, and in no way extend the responsibilities of Field Van, Inc., beyond the standard written warranty as presented in this manual. The descriptions, illustrations, and specifications in this manual were correct at the time of printing. We reserve the right to change specifications or design without notice, and without incurring an obligation to install the same on products previously manufactured.

Many of the instruction sheets and manuals for the various appliances and components have been incorporated into the Owner's Manual for your convenience. Refer to the manufacturers' operating instructions as needed and default to them if there is any conflict with this Owner's Manual.

Vehicle damage caused by failure to observe the instructions is not covered by the Limited Warranty.

Always keep these documents in the van. If you sell the van, always pass all documents on to the new owner.

SAFETY SYMBOLS

This manual includes the following symbols.

⚠ DANGER – Danger means if the danger is not avoided, it will cause death or serious injury.

⚠ WARNING – Warning means if the warning is not heeded, it can cause death or serious injury.

⚠ CAUTION – Caution means if the precaution is not taken, it may cause minor or moderate injury.

NOTICE – Notice is used to address practices not related to personal injury.

GENERAL OPERATIONS

Prior to travel, understand local, state, and country regulations that may affect your travels.

SERVICE

Our service team is here to assist you with any service needs that you have. Should you be in a location where our team is not able to assist you, most major RV service centers can help. Any work performed by outside service centers would not be approved under warranty without our service departments prior approval.

OCCUPANT AND CARGO CARRYING CAPACITY

This label is located at the driver door area and shows the maximum weight capacity for all passengers and cargo as well as the number of seat-belt riding positions.

The label also provides the weight of a full load of water and advises that this weight, along with the tongue weight counts as cargo.

MOTOR HOME OCCUPANT AND CARGO CARRYING CAPACITY VIN: _____
THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED: ____ kg or ____ lbs.
SAFETY BELT SEATING CAPACITY: ____
CAUTION:
A FULL LOAD OF WATER EQUALS ____ kg or ____ lbs. OF CARGO @ 1KG/L (8.3 LB/GAL) AND THE TONGUE WEIGHT OF A TOWED TRAILER COUNTS AS CARGO

VEHICLE CERTIFICATION LABEL

This label is found in the driver door area and contains the Vehicle Identification Number (VIN) label as well as essential vehicle information.

MANUFACTURED BY: Field Van, Inc DATE: _____ GVWR: _____ GAWR FRONT: _____ TIRES: _____ RIMS: _____ COLD INFLATION PRESSURE: _____ GAWR REAR: _____ TIRES: _____ RIMS: _____ COLD INFLATION PRESSURE: _____ THIS VEHICLE CONFORMS TO ALL FEDERAL MOTOR VEHICLE SAFETY STANDARDS AND BUMPER AND THEFT PREVENTION STANDARDS IN EFFECT ON _____ VIN: _____ TYPE: _____
--

VEHICLE CERTIFICATION DATA EXPLANATION

1. Date of completed vehicle
2. Gross Vehicle Weight Rating
3. Gross Front Axle Weight Rating
4. Gross Rear Axle Weight Rating
5. Specified tire size for rating
6. Specified wheel size for rating
7. Vehicle Identification Number (VIN)
8. Tire pressure rating
9. NHTSA classification

SAFETY & PRECAUTIONS

Only seats equipped with seat belts are to be occupied while the vehicle is moving.

Make sure all passengers have seat belts fastened. Lap belts should fit low on the hips and upper thighs. The shoulder belt should be positioned snug over the shoulder.

For pregnant women: Never place the shoulder belt behind your back or under your arm. Adjust the lap belt across your hips/pelvis, and below your belly. Place the shoulder belt across your chest (between your breasts) and away from your neck.

Child restraints should be installed properly according to manufacturers' instructions. See "Child Restraints".

All moveable or swiveling seats should be placed in forward facing travel position and locked while the vehicle is moving.

Never allow passengers to stand or kneel on seats while the vehicle is moving.

Sleeping facilities are not to be utilized while a vehicle is moving.

Examine any and all escape options and be familiar with their operation.

Inspect the fire extinguisher monthly for proper charge and operating condition. This should also be done before embarking on any extended trip.

WARNING

Operating, servicing, and maintaining a passenger vehicle or off-highway motor vehicle can expose you to chemicals including engine exhaust, carbon monoxide, phthalates, and lead, which are known to the State of California to cause cancer and birth defects or other reproductive harm. To minimize exposure, avoid breathing exhaust, do not idle the engine except as necessary, service your vehicle in a well-ventilated area and wear gloves or wash your hands frequently when servicing your vehicle. For more information go to www.P65Warnings.ca.gov/passenger-vehicle.

REPORTING SAFETY DEFECTS

The following text is published as required of manufacturers under Title 49, Code of U.S. Federal Regulations, Part 575 pursuant to the “National Traffic and Motor Vehicle Safety Act of 1966”.

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Field Van, Inc.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Field Van, Inc.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to [https:// www.safercar.gov](https://www.safercar.gov); or write to:

Administrator, NHTSA
400 Seventh Street, SW.,
Washington, DC 20590, USA.

You can find more information on vehicle safety at: <https://www.safercar.gov>

VEHICLE HANDLING

WARNING

This van has been designed, manufactured, and tested with concern for the protection of its occupants. We recommend you conduct the following inspections for your safety and the safety of your passengers before starting your vehicle.

1. **WHEELS** - Inspect for damage and check lug nuts torque.
2. **TIRES** - Inspect for wear and damage and check for recommended air pressure.
3. **LIGHTING** - Test for proper operation of all interior and exterior lights including dash lights, headlights, taillights, brake lights, clearance lights, and turn signals.
4. **EXITS** - Inspect release mechanism on emergency exit window (if installed), test both locks on main entrance doors for ease of operation and instruct passengers how to use both means of exit.
5. **SEAT BELTS** - Direct passengers to designated seats, be certain swivel seats are locked in the forward-facing position and require the use of a seat belt. See the operator's manual for occupancy and weight restrictions.
6. **APPLIANCES** - Turn off the appliances and latch or lock doors where provided.
7. **LOOSE PARCELS** - Stow or secure all items.
8. **UTILITY SUPPLY LINES** - Disconnect all externally connected electrical, sewer and water lines and secure properly.
9. **ENTRANCE DOORSTEP** - If you have retractable running boards, ensure step is in the retracted position for travelling. Door step refers to entry but retracted position refers to electric running board.

Read your vehicle's owner's manual for further precautions.

WARNING

Risk of accident due to a high center of gravity

Utility vehicles have a significantly higher rollover rate than other types of vehicles.

As a result of the high center of gravity, the vehicle can skid or rollover in the event of abrupt steering movements and/or inappropriate speed.

Adapt the speed and the driving style to the driving characteristics of the vehicle as well as the prevailing road and weather conditions.

If this vehicle is not operated in a safe manner it could result in an accident, a rollover as well as severe or fatal injuries.

In a rollover crash, an unbelted person is significantly more likely to result in death than a person wearing a seat belt.

The driver and all vehicle occupants should always wear a seat belt when the vehicle is in motion.

PROPANE WARNING

WARNING

Do not fill propane container(s) more than 80 percent of their capacity. Overfilling propane container(s) can result in uncontrolled propane flow, which could lead to a fire or explosion and result in death or serious injury.

WARNING

Do not place propane cylinders inside the vehicle. Propane cylinders are equipped with safety devices that relieve excessive pressure by discharging propane to the atmosphere. Propane gas is highly flammable. It can lead to a fire or explosion and result in death or serious injury.

- Do not place or store gasoline or other flammable liquid containers inside the vehicle.
- Never smoke or use an ignition source or open flame while refilling a vehicle fuel tank or propane gas tank.
- Portable fuel-burning equipment, including wood and charcoal grills and stoves, shall not be used inside the recreational vehicle. The use of this equipment inside the recreational vehicle may cause fires or asphyxiation.
- Propane gas regulators must always be installed with the diaphragm vent facing downward. Regulators are equipped with a protective cover. Make sure that the regulator vent faces downward and that the cover is kept in place to minimize vent blockage, which could result in excessive gas pressure causing fire or explosion.

DANGER

Do not use gas cooking appliances for comfort heating. Doing so can lead to carbon monoxide poisoning, which can lead to death or serious injury.

WARNING

Gas cooking appliances need fresh air for safe operation.

Before operating a cooking appliance, open vents or windows and/or turn on an exhaust fan if applicable to provide ventilation. Flames consume oxygen, which need to be replaced to ensure proper combustion. Improper use can result in death or serious injury.

Unlike homes, the amount of oxygen supply is limited due to the size of the recreational vehicle. Proper ventilation will improve the function of the appliance and also help to avoid the potential danger of asphyxiation. It is especially important that cooking appliances not be used for comfort heating, as the danger of asphyxiation is greater when the appliance is used for long periods of time. Failure to comply could result in death or serious injury.

PROPANE DETECTOR

Included in your conversion when you order a Propane Tank System.



Operation

When you connect power to a new detector it goes through a startup cycle. The green LED (marked “Power”) comes on. The red LED (marked “Alarm”) and horn will pulse for approximately 5 seconds until the sensor is warmed up.

If no fumes are detected, the red LED and horn stops and the green LED remains on, indicating the detector is active.

If Fumes Are Present

If fumes are present at start-up, the horn and red LED will continue to pulse - from 60 pulses/minute for concentrations lower than 25% of the lower explosive level, to 80 pulses/minute for higher concentrations.

If fumes are detected at any time after start-up the horn and red LED will start to pulse.

If this occurs, immediately shutoff the propane supply and ventilate the area.

Avoid using any source of ignition, including electric switches, electric motors,

pilot lights or other open flames. When the fumes have dissipated, the horn will stop and the red LED will turn off, indicating a safe atmosphere.

Any leaks present should be corrected before resuming the operation of the propane system.

A continuous tone indicates a short in the electronics and a single pulse every 10 seconds indicates a faulty sensor. If either of these signals occur, return the detector to your dealer for repair or warranty replacement.

False Alarm

The presence of other organic vapors, such as paint fumes, solvents or hair spray can trigger a false alarm.

WARNING

DO NOT BLOCK AIR CIRCULATION IN THE AREAS THE DETECTORS ARE LOCATED. CHECK THE DETECTORS MONTHLY. BE SURE YOUR DETECTORS ARE OPERATING WHEN USING YOUR VEHICLE

Propane Detector is wired into the van's 12V System.

NOTICE

Do not shut off 12V master shut off switch when occupying the vehicle as this will disable the propane detector.

Smoke & Carbon Monoxide Detectors have separate AA batteries, replace as needed. When the battery is getting low, a beeping sound will occur.

See Manufacturer's literature and operating instructions as information may change.

CARBON MONOXIDE WARNING

WARNING

Avoid inhaling exhaust gases, as they contain carbon monoxide, which is a colorless, odorless, and poisonous gas. Death or serious injury can result

It is recommended that the vehicle exhaust system and chassis be inspected by a qualified recreational vehicle service center:

- Each time the vehicle is serviced for an oil change.
- Whenever a change in the sound of the exhaust system is noticed.
- Whenever the exhaust system, underbody, or rear of the vehicle is damaged.

To allow proper operation of the vehicle's ventilation system, always keep front

ventilation grill inlet clear of snow, leaves, or other obstructions to the airflow

⚠ WARNING

DO NOT OCCUPY A PARKED VEHICLE WITH ENGINE RUNNING FOR AN EXTENDED PERIOD OF TIME.

Do not run the engine in confined areas, such as a garage, except to move the vehicle into or out of the area.

CARBON MONOXIDE (CO) AND SMOKE ALARM

The vehicle is equipped with a joint Carbon Monoxide (CO) detector and Smoke Alarm.



The CO part of the alarm is designed to detect toxic carbon monoxide gas fumes resulting from incomplete combustion. It will detect CO gas from any combustion source such as the furnace, gas range/oven, water heater, refrigerator, chassis engine, and electric generator engine.

The Smoke Alarm is designed to detect smoke.

Test the alarm's operation after the van has been in storage, before each trip, and at least once per week during usage by pressing the Test/Reset button on the alarm.

⚠ WARNING

Failure to replace this product by the "REPLACE BY DATE" printed on the alarm cover may result in death.

When replacing the smoke and CO alarm, we recommend replacing it with the same model, or with one listed for RV applications.

FIRE EXTINGUISHER

A dry chemical fire extinguisher is found near the front passenger seat.

Familiarize yourself with the removal and operating instructions on the fire extinguisher.

Inspect the fire extinguisher for the proper charge at least once a month in accordance with the National Fire Protection Association Electrical (NFPA) recommendations, as stated on the label. If the extinguisher is past its expiration date or charge is insufficient, the fire extinguisher must be replaced.

When you replace the fire extinguisher, the replacement must be the same type and size. We recommend obtaining a replacement from a reliable RV parts supplier.

NOTICE

Do not test the fire extinguisher by discharging it. Partial discharge can cause leakage of pressure or content, which would make the unit inoperative when needed. When using the fire extinguisher, aim the spray at the base of the fire.

ELECTRICAL

Careless handling of electrical components can be fatal. Never touch or use electrical components or appliances while feet are bare, while hands are wet, or while standing in water or on wet ground.

Improper grounding of the vehicle can cause personal injury. Do not plug the utility power cord into an outlet which is not grounded and do not adapt the plug to connect to a receptacle for which it is not designed.

Do not attach an extension cord to the utility power cord.

Do not use any electrical device that has had the ground pin removed.

Avoid overloading electrical circuits. Replace fuses or circuit breakers with those of the same size and amperage rating only. Never use a higher rated fuse or breaker.

Use caution when handling or working near electrical storage batteries. Always remove jewelry and wear protective clothing and eye covering. Avoid creating sparks.

EMERGENCY EXITS

Side Door

1. Unlock the door by pulling up on the unlock lever.
2. To open the passenger side door, refer to vehicle manufacturers operating manual for operation of doors.

Rear Double Doors

1. Unlock the rear passenger side double door by either sliding latch to the left

- or pulling up on the unlock lever.
2. On the passenger side door, pull the latch forward and push the door open
 3. NOTE: The rear passenger side door must be open before opening the rear driver side door.
 4. On the driver's side door, push the latch rearward and push the door open.

POWER SLIDING DOOR [IF EQUIPPED]

Your van may be equipped with a Power Sliding Door located on the passenger side of the vehicle. Please refer to the manufacturer's owner's manual for operations on Power Sliding Door.

WARNING

Keep people away from operating mechanisms and pinch hazard areas during use. Failure to do so could cause injury

FORMALDEHYDE

Many building materials emit formaldehyde and some materials used in this van can emit them as well. Eye, nose, and throat irritation, headache, nausea, and asthma-like symptoms, including shortness of breath have been reported because of formaldehyde exposure. Reaction to formaldehyde exposure may vary among individuals.

Inadequate ventilation may allow formaldehyde and other contaminants to accumulate in indoor air. Ventilate your van before and during usage by opening the windows or operating the exhaust fan or air conditioning system. If you have any questions about formaldehyde risk, consult your doctor.

MOLD

Molds are natural in our environment and play an important role in breaking down organic matter. Due to the nature of van travel, it will be in contact with mold. Ongoing preventative maintenance is important to reduce the possibility of mold growth in the van. Keep the inside of the van as dry and clean as possible. Moisture plays a large part of mold growth. Keeping humidity low and reducing condensation build up in the van will aid in preventing mold growth.

Detect and repair any leaks as they can be a factor in mold growth. If mold has developed, clean the area with soap and water and then use a bleach solution. If the item cannot be cleaned, it will need to be removed and replaced.

It is important to repair any new leaks as quickly as possible by a qualified service center. Regular visual inspections of the entire vehicle are recommended before each trip.

Mold and Warranty Claims

If Field Van, Inc. finds that mold in your van was caused by a manufacturing

defect reported to Field Van, Inc., within the warranty period Field Van, Inc., will clean the affected area(s) and/or replace items it deems necessary. This is the only circumstance in which Field Van, Inc., will cover mold under its limited warranty.

Field Van, Inc., will not assume responsibility for mold deemed to be a result of a user's lack of timely and appropriate action to mitigate circumstances should a problem occur.

EFFECTS OF PROLONGED OCCUPANCY

Your van was designed primarily for recreational use and short-term occupancy. If you expect to occupy your van for an extended period, be prepared to deal with condensation and humid conditions that may be encountered.

Humidity and Condensation

Moisture condensing on the inside of windows is a visible indication that there is too much humidity inside the van. Excessive moisture can cause water stains or mildew, which can damage interior items such as upholstery and cabinets. When you recognize the signs of excessive moisture and condensation in your van, you should take immediate action to minimize their effects. You can help reduce excessive moisture inside the van by taking the following steps:

Ventilate with Outside Air

Partially open one or more windows and a roof vent to circulate outside air through the van. In cold weather, this ventilation may increase the use of the furnace, but it will greatly reduce the condensation inside the van.

Minimize Moisture Released Inside the Van

Run a ceiling vent fan while cooking, showering, or engaging in any activity that creates steam or added moisture to the interior to carry water vapor out of the van. Avoid making steam from boiling water excessively or letting hot water run. Avoid bringing extra moisture into the van by way of soaked clothing or snow on shoes. Do not hang-dry, wet overcoats or clothing inside the van.

ROADSIDE EMERGENCY

Field Van, Inc., advises obtaining professional roadside service should the situation arise. If an emergency requires you to change a spare tire or work on your vehicle, we advise you to use extreme caution. Follow the instructions in the vehicle manufacturers' owner's manual.

Remember to always properly inflate your tires and rotate tires regularly to ensure longer life and mitigate the risk of flat tires.

If you see or hear steam escaping from the engine compartment or have reason to suspect an engine overheating condition, pull the vehicle over, stop the

engine, get passengers out of the vehicle, and consult the vehicle manufacturers' owner's manual.

If professional towing services are needed, please advise the company of the weight and length of your vehicle. Refer to the vehicle manufacturers' owner's manual for instructions on towing.

Field Van, Inc., does not assume responsibility for any damage incurred while towing this vehicle.

DRIVING OPERATIONS

Refer to the vehicle manufacturers' owner's manual for proper operation as related to the original chassis. This includes controls, instrumentation, switches, and other controls. Operations for cruise control, climate control, gauges, wipers, lights, front seats, and safety belts.

WEIGHT LOADING

Always secure loose items prior to driving. These items can become dangerous projectiles in sudden stops, quick maneuvers, and accidents.

Distribute weight evenly to assist in vehicle handling. Never exceed the GVWR (Gross Vehicle Weight Rating) or the GAWR (Gross Axle Weight Rating). GVWR is the total allowable weight of the vehicle, including passengers, cargo (including water), and tongue weight of a towed trailer.

The GAWR is the weight the axle is rated for. The combined measured weight at the front wheels plus the measured rear wheel weight should never exceed GVWR.

Additionally, never exceed the individual tire weight ratings.

Never exceed the GCWR (Gross Combination Weight Rating), the maximum total weight of the vehicle and anything towed.

ROOF RACKS [IF EQUIPPED]

Always use caution when using a ladder to load the roof rack. Bringing objects up or down from the roof can be difficult due to the weight or size. The ladder or rack can also be slippery due to water, mud, ice, or debris. Slipping or falling can cause severe death or injury.

The roof rack for stowing gear and accessories up to 100 lbs. Adding even small amounts of weight on the roof can affect the center of gravity and handling characteristics of the vehicle. Make sure everything stowed on the roof rack is properly secured..

WARNING

Vehicles with a high center of gravity have a higher risk of rollover.

SEAT BELT OPERATION

WARNING

Whenever the vehicle is in motion never sit or lounge anywhere there is no seat belt.

⚠ WARNING

Only seats in the forward-facing position have been pull tested. While some lap bets have been installed on sideways-facing seats, they do not meet FMVSS standards. Sitting in these seats while driving is done so at your own risk.

Lap Belts

The lap belts must be worn as low as possible and fit snugly across the hip area. Always sit erect and well back in the seat. To gain full protection of the safety belt, never let more than one person use the same safety belt at any one time, and do not let the safety belts become damaged by pinching them in the doors or in the seat mechanism. After any serious accident, any seat belts which were in use at the time must be inspected and replaced if necessary.

⚠ WARNING

Snug and low belt positions are essential. This will ensure that the force exerted by the lap belt in a collision is spread over the strong hip area and not across the abdomen, which could result in serious injury.

Lap/Shoulder Belts

When the lap-shoulder belt is in use, the lap belt must ride low across the hip area and the shoulder belt must ride diagonally over the shoulder toward the buckle.

The shoulder belt is designed to lock only during a sudden stop, sudden body movement, or a collision. At all other times it will move freely with the occupant.

CHILD RESTRAINTS

Child restraint systems reduce the risk of injury in an accident or sudden maneuver when used properly. It is important to install and use the child restraint system properly and follow all manufacturer instructions on installation and use.

MAINTENANCE & CARE

The van is built with high-quality, durable materials. Some materials will need some extra care to ensure long life. Use common sense when there are any questions about which cleaning products to use. Or refer to the Cleaning Appendix for manufacturer's suggested cleaning products deemed safe to use.

Note: If you are unsure about the cleaning product, the recommendation is to test it on a small inconspicuous area first.

COUNTERTOPS

Do not cut directly on countertop surfaces.

Solid Surface Countertops

REMOVING DIRT & RESIDUE

Use soapy water or an ammonia-based cleaner. Rinse and wipe dry.

PREVENTING HARD WATER MARKS

Wipe surfaces dry immediately after spills or cleaning. Ordinary vinegar removes most dried water spots.

PREVENTING HEAT DAMAGE

Always use trivets or hot pads under hot objects. Prolonged or extreme heat can cause discoloring. Allow cookware to cool before placing it on a solid-surface countertop.

DISINFECTING

Wipe surfaces with mixture of one-part water / one-part household bleach. Rinse with clear water than wipe dry.

REMOVING STUBBORN STAINS

Use a mixture of one-part water/one-part household bleach or a liquid cleanser such as Soft Scrub® with Bleach. Rinse with clear water than wipe dry. If you happen to spill red wine on your countertops, the spill can easily be cleaned up with denatured alcohol & a cotton rag, using a circular wiping motion. Avoid strong acidic products such as toilet or oven cleaners.

ADDITIONAL PREVENTIVE MEASURES

Prevent other damage by not exposing your countertop to strong chemicals, such as paint removers, oven cleaners, etc. If contact does occur, rinse immediately and thoroughly with clear water.

If you spill nail polish on the surface, remove it with a non-acetone polish

remover.

Recommended Care & Maintenance Products

- Soft Scrub Liquid Cleanser
- Denatured Alcohol

Butcher Block Countertops

Cleaning a butcher block with a natural-oil finish is easy. Wash the board's surface using a dish cloth dipped in soapy water. Once done cleaning the board, wash and rinse the dish cloth, wring it out, then wipe the block surface clean. Finish up by using a dry cloth to thoroughly dry the surface of the block. Be sure not to leave any water sitting on the wood surface, as this may cause water spotting. If any spotting does occur, you can renew the surface of your butcher block by sanding it and reapplying a generous coat of block oil or cream.

OIL MY NATURAL-OIL BUTCHER BLOCK

If you allow a board or block with a natural oil finish to get too dry, it could split or crack, so it is critically important that you clean and oil it regularly. This can also extend its natural beauty and useful life.

While the typical or average user should apply butcher block oil or board cream monthly, if you use yours heavily or frequently, you should oil it every two weeks to prevent it from drying out and cracking.

Also, exposure to extreme swings in humidity can swell and shrink a butcher block enough to cause checks in its surface, even with regular care and maintenance. To remedy this, apply a generous amount of oil and spread it evenly using a plastic grocery bag. (This is preferred to using a cloth, which will absorb and retain much of the oil). Smooth it out over the top and sides of the block and allow it to stand overnight. In the morning, remove any excess oil with a paper towel.

An especially effective maintenance regimen involves the use of both board cream and block oil. First, apply a coat of butcher block oil following the instructions above. The oil will penetrate deep into the wood maximizing moisturization. Then apply a board cream to lock in the moisture and leave a silky, wax barrier on the surface of the wood.

IMPORTANT NOTES:

It is equally important that you NOT over-oil butcher block. Over-oiling can cause wood fibers to prematurely break down.

In rare instances, mineral oil will raise the grain of the wood very slightly on new blocks, leaving a patch that is rough to the touch. This is a natural reaction, NOT a product defect. Roughness can be alleviated easily by lightly sanding the affected area and reapplying oil. Repeat the process as necessary until the block remains smooth.

Keep butcher blocks out of direct sunlight and do not allow water or other liquids to stand.

CABINETS

Wipe with a damp cloth when needed.

UPHOLSTERY

Clean with mild soap and water. Harsh chemicals can discolor fabrics. You can use Leather cleaners on Leather seats.

EXTERIOR

Wash with warm soapy water or general cleaners used for washing vehicles.

Do not take the vehicle through an automated car wash as damage to the van and/or exterior accessories may result.

STORAGE

Properly preparing your vehicle for storage will reduce the possibility of storage related damage. Prepare the van for vacancy like you would if leaving your house for an extended period.

- Remove all items that may cause odors or attract pests from cabinets and fridge.
- Clean and defrost the fridge, then prop the door open to allow odors to dissipate.
- Place an open box of baking soda inside the fridge to help absorb odors.
- Lubricate door hinges and locks.
- Follow procedures in your Chassis Owner's Manual for long term storage.
- Wash and wax the vehicle exterior.
- Inspect all seals around doors, windows, vents, and any other joints. Replace or repair any that are damaged.
- Close windows and roof fan. Protect all appliance vent openings from pests.
- Clean the interior of the vehicle.
- If storing the RV in cold climates, be sure to follow the winterization procedures.

APPLIANCES

The appliances installed in the van are manufactured by reputable RV appliance makers and have been tested by independent laboratories to meet all applicable standards and codes set for RV appliances.

See Section - Safety and Precautions of this manual for any safety and precautions you need to take regarding the operation of your appliances.

REFRIGERATOR

The refrigerator operates on 12V DC Electricity. The unit will always run on 12V DC power when available. When the van's 12V DC disconnect switch is turned to off, the refrigerator has no 12V DC power.

DANGER

Do not let children play inside the van unattended. Unlike home refrigerators or freezers that one could push open the door from the inside, the van refrigerator has a travel latch and when engaged would trap a child inside resulting in suffocation leading to death or serious injury.

Basic Operation

Turn the power on and set the thermostat to desired level. Allow the refrigerator to cool down to temperature before placing food inside.

NOTE: The refrigerator will retain temperature more efficiently if the unit remains full of food and if the food is cold before it is placed inside.

To turn off the refrigerator, refer to the refrigerator manual for directions as they differ per refrigerator.

Further information is in the manufacturers' user guide provided in the Info Manual for complete operating instructions, safety precautions, and maintenance information.

COOKTOPS

Electronic Induction Cooktop [If Equipped]



The induction cooktop operates on 110V AC and requires the van to either be connected to shore power or for the operator to turn the inverter on if using battery power to operate the induction cooktop.

Press the “ON/OFF” button to begin operating the unit. The power light indicator turns on and the unit will immediately begin heating if proper ferromagnetic cookware is placed on the cooktop.

There are two main heat settings:

- A quick touch level selection featuring settings 1-10. The default heat setting is level 5. The settings can be adjusted by pressing the “+/-” key to achieve the desired heat.
- An exact temperature setting ranging from 150°F to 450°F. The default temperature setting is 270°F and the temperature can be adjusted in 30° increments.

Once you are finished cooking and you have turned your cooktop off, simply wipe it down with a slightly damp cloth.

NOTICE: It is recommended to be connected to shore power when operating the induction cooktop to prevent draining of the batteries.

NOTICE: Batteries will be depleted with the use of the Inverter. Monitor battery levels regularly when not connected to shore power.

Propane Cooktop [If Equipped]

WARNING

Cooking appliances need fresh air for safe operation. Before operation: Open window, roof vent or attic fan. A warning label is in the cooking area to remind the user to provide an adequate supply of fresh air for combustion. Unlike a home, the amount of oxygen supply is limited due to the size of the recreational vehicle, and proper ventilation when using the cooking appliance(s) will avoid dangers of asphyxiation. It is especially important that cooking appliances not be used for comfort heating as the danger of asphyxiation is greater when the appliance is used for long periods of time.

WARNING

IT IS NOT SAFE TO USE COOKING APPLIANCE FOR COMFORT HEATING.

This appliance does not have a pilot. It is equipped with a push button electronic ignition device which automatically lights the burner when the gas control knob is turned to the light position. Do not light the burner by hand.

BEFORE OPERATING - smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

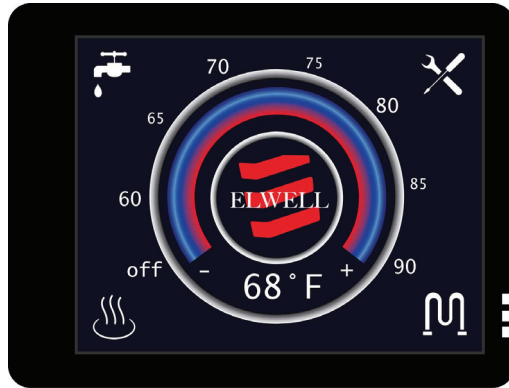
Use only your hand to push in or turn the gas control knob to the light position. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

WHAT TO DO IF YOU SMELL GAS




- Extinguish any open flame
- Evacuate all people from the vehicle
- Shut off gas supply at the gas container or source
- Do not touch any electrical switches or use any phone or radio in the vehicle.
- Do not start the vehicle's engine or electric generator.
- Contact the nearest gas supplier or qualified service technician for repairs.
- If you cannot reach the above, contact the nearest fire department.
- Do not turn on the gas supply until the gas leak(s) has been repaired.



HEATING [IF EQUIPPED]

ELWELL TIMBERLINE SYSTEM [IF EQUIPPED]






Timberline heat and hot water is generated by the Autoterm Binar Compact, a diesel or gasoline heating unit made for the most adverse conditions.

The best way to use the Timberline system is to enable the Burner , the Electrical Element , and the Hot Water  icon. The Timberline system will self-manage, prioritizing the element if the coach is plugged in and only using the diesel/gas burner as needed. When its cold outside, set the thermostat to your desired temperature and the system will manage energy while maintaining the selected set point.



If you are utilizing multiple 120V appliances at the same time (Coffee maker, AC, etc) you can turn off the Electric Element  to conserve amperage and the Timberline system will maintain hot water and heat via the fuel burner. If you want to conserve fuel you can choose only the Electric Element .

Hot Water

When the Hot Water icon  is selected the system will cycle and maintain the hot water heat exchanger so hot water is available on demand. Note: For hot water to be maintained, either the Burner  or the Electrical Element  icons must be selected (or both).


Electrical Element

When the 120V Electric Element  icon is selected the 1500W 120V element will activate and provide supplemental heat to the coolant.



When both the Burner  and Electrical Element  icons are selected the system automatically prioritizes using heat from the electric element. If there is greater heating demand on the system, the burner will automatically engage and

heat the glycol.

Burner

When the Burner  icon is selected the diesel/gas heater will run and keep the coolant hot and ready for hot water and heat. The heater will cycle on and off, maintaining the temperature of the coolant.

Interior Temperature

The interior temperature set point can be set by either sliding the temperature bar to the desired temperature or by pressing the + and - icons under the temperature bar. When the vehicle is cold the fans run on high until the interior temperature starts to reach its target. The fans then automatically slow down and remain on low levels, maintaining the comfort levels inside. Note: In order for the system to heat the interior, either the Burner  or Electric Element  icons must be selected (or both).

PROPANE [IF EQUIPPED]

PROPANE HEATER [IF EQUIPPED]

It is important that you read and understand all the manufacturers' literature before operating the furnace.

WARNING

Do not operate furnace while vehicle is in motion or being towed.

Operation in high altitudes may require a special propane blend: see propane fill station personnel for advice.

For proper furnace operation, battery voltage must be above 10 volts. If the red light on the battery monitor is ON, then the battery voltage is too low. Recharge battery by idling engine or with inverter/charger if 110V AC power is available.

Read before Operating

WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- This appliance does not have a pilot. It is equipped with an electronic ignition device which automatically lights the burner. Do not attempt to light the burner by hand.
- BEFORE OPERATING - smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, do not try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been underwater.
- Do not store anything around the furnace unit. It is very important to have proper ventilation.

What To Do If You Smell Gas

- Extinguish any open flame
- Evacuate all people from the vehicle
- Shut off gas supply at the gas container or source

- Do not touch any electrical switches or use any phone or radio in the vehicle.
- Do not start the vehicle's engine or electric generator.
- Contact the nearest gas supplier or qualified service technician for repairs.
- If you cannot reach the above, contact the nearest fire department.
- Do not turn on the gas supply until the gas leak(s) has been repaired.

Operating Instructions

1. STOP! Read the safety information above the label.
2. Set the thermostat to lowest setting
3. Turn off all electric power to the appliance.
4. The appliance is equipped with an electronic ignition device which automatically lights the burner. Do not try to light the burner by hand.
5. Turn the shut-off valve to OFF. This furnace is equipped with a valve shutoff switch. With switch in OFF position, gas will not flow to burner nor will the furnace operate.
6. Wait five (5) minutes to clear out any gas. Then smell for gas including near the floor. If you then smell gas, STOP! Follow "B" in the safety information above on the label. If you do not smell gas, go to the next step.
7. Turn on all electric power to the appliance. These units are for use with LP gas only. LP gas is heavier than air. Therefore, to better clear out any gas, the heater should be operated for five (5) minutes with the blower on and the gas off.
8. Turn the shut-off valve to ON.
9. Set the thermostat to the desired setting
10. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

To Turn Off Gas Appliance

1. Set the thermostat to the lowest setting, then move the lever into the OFF position.
2. Turn OFF all electric power to the appliance if service is to be performed.
3. Turn the shut-off valve to OFF. Do not force it.

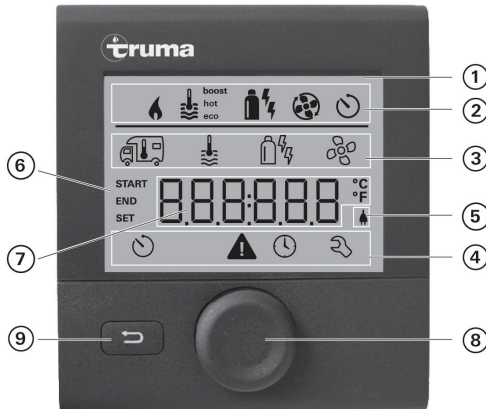
WARNING

Be sure the furnace and all ignition systems are OFF during any type of refueling and while the vehicle is in motion or being towed.

WARNING

Improper installation, adjustment, alteration, service, or maintenance can cause property damage and personal injury or loss of life. Refer: to the installation instructions and/or owner's manual provided with this appliance.

TRUMA COMBI HEATER & WATER HEATER [IF EQUIPPED]



Display and operating elements

1. Display
2. Status Line
3. Menu line (top)
4. Menu line (bottom)
5. Power supply display 120Vs AC (main supply)
6. Time switch display
7. Settings/values
8. Rotary push button
9. Back button

Description

- A rotary push button (8) is used to select menu items in the menu lines (3 + 4) and to adjust settings.
- Information is shown on the backlit display (1).
- The Back button (9) is used to go back to a previous menu.

ROTARY PUSH BUTTON

The rotary push button (8) is used to select and change set points and parameters; it is then tapped to save the value. Selected menu items flash.

TURN CLOCKWISE (TO THE RIGHT)

- The menu is scrolled through from left to right.
- Increases values (+)

TURN COUNTERCLOCKWISE (TO THE LEFT)

- The menu is scrolled through from right to left.
- Reduced values (-)

TAP

- Save a selected value
- Select a menu item, go to the setting level

PRESS (3 SECONDS)

- Main switching function – control panel on/off

BACK BUTTON

- Press the back button (9) to go back to the previous menu and cancel the settings. This means that previous values remain unchanged.

Instructions For Use

- If there is an interruption to the power supply, the clock must be reset.
- If a new furnace is connected to the bus system of the control panel, repeat the procedure described in “Initial start-up”.

CHANGE ROOM TEMPERATURE

- Use the rotary push button (8) to select the icon in the menu line (3).
- Tap the button to go to the setting level.
- Select the desired temperature with the rotary push button (8).
- Tap the rotary push button (8) to confirm the value.
- Adjustable temperature range:
 - 40 – 86°F, Increments 1°F
 - 5 – 30°C, Increments 1°C
- Menu line (2) a = Furnace* is switched on Flame icon lights and flashes until desired room temperature is reached.

Information: The temperature can be changed quickly using the rotary push button (8) (on the stand-by screen).

CHANGE HOT WATER LEVEL

- Use the rotary push button (8) to select the icon in the menu line (3).
- Tap the button to go to the setting level.
- Select the desired hot water level with the rotary push button (8).
- Tap the rotary push button (8) to confirm the value.

- Menu line (2) Thermometer icon
- A = Boiler* - Hot water generator is on.
- B = eco** - Water temperature 104 degrees F (40 degrees C)
- C = hot – Water temperature 140 degrees F (60 degrees C)
- D = boost* - Boiler content is heating quickly (boiler priority) for up to 40 minutes. The water temperature is then kept at the highest level (about 144 degrees F (62 degrees C) for two subsequent heating cycles. When the water temperature is reached, the furnace will push heated again.

*This icon flashes until the desired water temperature is reached.

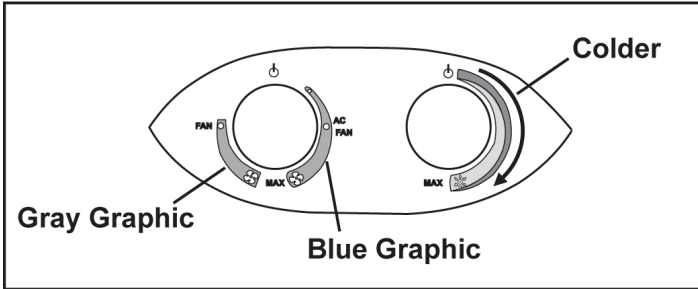
**The water temperature 104 degrees F (40 degrees C) can be kept in “Heating and hot water mode” for a limited time only (heating priority).

COOLING [IF EQUIPPED]

12V AIR CONDITIONERS

There are a few different manufactures that could be used on the vehicle. Please refer to the manufactures owners manual for proper operations of the unit.

110V DOMETIC PENGUIN II A/C ROOFTOP [IF EQUIPPED]



Selector Switch & Thermostat

Has a five position Selector Switch including “OFF”. This controls fan speed and cooling modes.

The thermostat controls the compressor ON/ OFF operation for a temperature range from approximately 65° F to 90° F at the ADB inlet, depending on the knob position.

Important: When the unit is turned on and the thermostat calls for cooling, the compressor will start. After shutting the unit down manually by either the selector switch or the thermostat, always wait 2-3 minutes before turning on the unit again. This allows the refrigerant pressures in the unit system to be equalized so the compressor may restart.

Cooling Operation (Blue Graphic)

Set the thermostat at the desired temperature level.

Select the cooling mode that best satisfies your needs:

HIGH COOL: Selected when maximum cooling and dehumidification is required.

LOW COOL: Select to maintain room at desired comfort level. Normally this speed is used for nighttime operation. Note: The compressor will come on as cooling is required to maintain the selected temperature level. The blower runs continuously.

Fan Operation (Gray Graphic)

This will circulate the air in your RV without cooling. There are two positions: HIGH FAN or LOW FAN to select from, depending upon personal choice.

“OFF” Position

This is to turn unit off.

ELECTRICAL

Your van is equipped with an electrical system consisting of two separate voltages:

- 12V DC system (battery current)
- 110V AC system (household current or shore power)

The electrical system on the van can be powered and charged in four ways:

- 30A shore power connection
- Factory or auxiliary (if equipped) alternator while the van engine is running
- Solar (if equipped)
- Generator (if equipped)

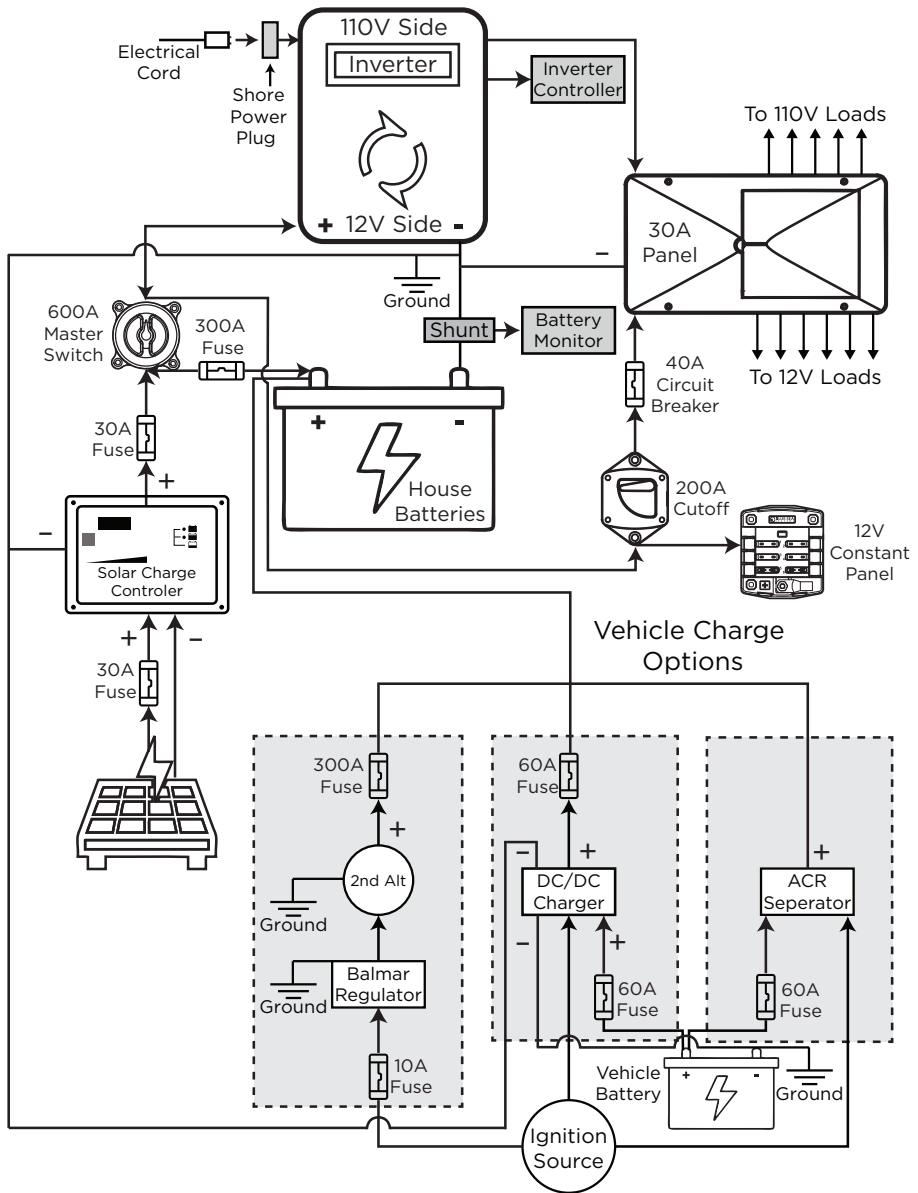
ELECTRICAL CAUTIONS

WARNING

Careless handling of electrical components can be fatal.

- Never touch or use electrical components or appliances while feet are bare, while hands are wet, or while standing in water or on wet ground. Improper grounding of the vehicle can cause personal injury.
- Do not plug the utility power cord into an outlet which is not grounded and do not adapt the plug to connect to a receptacle for which it is not designed.
- Do not attach an extension cord to the utility power cord.
- Be sure that all electrical appliances to be used contain 3-prong plugs for proper grounding.
- Avoid overloading electrical circuits.
- Replace fuses or circuit breakers with those of the same size and amperage rating only
- Never use a higher rated fuse or breaker
- Use caution when handling or working near electrical storage batteries.
- Always remove jewelry and wear protective clothing and eye covering.
- Avoid creating sparks.

ELECTRICAL DIAGRAM



ELECTRICAL SYSTEM HOUSE 110V AC

The 110V AC system operates from the shoreline cord connected to an outside 110V utility service, such as those at a house or campgrounds. Optionally, it can also connect to a portable generator capable of producing adequate wattage.

When the shoreline cord is connected to an outside power source, or when a auxiliary electric generator is running, the power inverter/charger automatically changes a portion of the 110V AC current to 12V DC current and charges the house batteries. All 12V DC equipment is still being powered by the house batteries, but the batteries are being charged by the 110V current.

In addition, the following equipment is entirely dependent on a 110V AC current, and often requires being connected to shore power or an adequate battery system if equipped with and using your inverter: 110V air conditioner, microwave oven, induction stove top, and any 110V electrical equipment used at convenience outlets.

Power Cord - External Shore Power (Detachable)

WARNING

Do not use an extension cord rated for less amperage than your inverter shore power setting. Improper sized cords, damaged cords, and poor connections can lead to fire, which can result in death or serious injury

WARNING

Do not connect the external power cord to any receptacle until you have verified proper polarity and grounding. Be sure all prongs of the supply cord are properly plugged into the receptacle. Failure to observe can result in death or serious injury.

Plug the adapter end into the sidewall plug-in (typically located behind the rear driver side wheel) and the receptacle end to a suitable power outlet box. The supplied power cord is designed to ground the electrical system through the plug receptacle. It is also designed to carry the amperage output of most campground outlets.

Park Fuses or Breakers

Most campgrounds are equipped with a fuse or circuit breaker at the receptacle (which we recommend shutting off before engaging or disengaging the power cord.) This protects the park's wiring, as well as the power cord on your vehicle from electrical damage. If electrical power fails, contact the park attendants and have them check the fuse or breaker for your supply receptacle.

INVERTER/CHARGER UNIT [IF EQUIPPED]

The inverter has an AC input circuit breaker to protect the inverter from overload. The inverter also has “built in” features that protect the system from abnormal conditions. See the inverter information included in your Info Manual for a complete explanation of the system and operating instructions.

NOTICE Batteries can be depleted with the use of the inverter.

Monitor battery levels regularly when not connected to shore power. The inverter can also be used while driving the van because the engine alternator will charge the batteries while driving. It is recommended to set inverter to off position when not using 110V appliances or outlets.

Charging

The battery charger converts 110V AC current from the shore power or auxiliary generator into 12V DC current to charge the house batteries, which is in turn used to power the 12V items in the van.

The unit charges house batteries while 110V AC external power is connected. The charger will automatically sense the condition of the battery. If it is below full charge, the charging section will start charging the batteries.

If the house batteries have been extremely discharged, they will accept a charge at a relatively high amperage rate. If they are only slightly discharged, they will charge at a lower amperage rate.

The rate of charge will decrease as the batteries reach full charge, then will continue trickle charging at a very low amperage rate. If your battery does not charge as described above, it is possible the battery is defective or exceeded its useful life.

INVERTER/CHARGER CONTROL PANEL

The inverter/charger has a wall-mounted control panel. It will also display warnings for overload conditions, charging turned off, Inverter turned on, battery charge status, or other operating failure conditions.

When the inverter is not being used, it should be shut off on the control panel. The inverter could drain the house batteries if the shore power is not connected.

Magnum System Control Panel (ME-RC) [If Equipped]



FRONT PANEL

The ME-RC's front panel contains LED indicators and an LCD display for viewing system status, push buttons to control system operation, and rotary/selection knob that enables you to locate and select system information and settings.

LED INDICATORS

There are four LED indicators on the front panel that light solid or blink to indicate the inverter/charger's status. When the remote is first powered-up, all the LEDs come on as it goes through a self-test. Once the self-test is complete, the LEDs along with the LCD provide the operating status of the inverter/charger.

LCD DISPLAY

The LCD display is used for setting up the system operation, as well as viewing the current operating status and fault conditions. This display has two lines of alphanumeric characters and features a backlight that can be set to turn off to conserve power. The top line provides inverter/charger status, which is detailed in this section. The bottom line displays battery information while using the METER menu, system troubleshooting information while in the TECH menu, and displays menu items that can be configured for your specific system operation when using the SETUP menu. This display automatically powers-up with the current system status on the top line and the home screen (detailing the inverter's DC voltage and current amperage) on the bottom line.

ON/OFF PUSH BUTTONS

- ON/OFF INVERTER – This button toggles the inverter function on and off. The green INV LED turns on and off with the button.
- ON/OFF CHARGER - This button toggles the charger function on and off

whenever the charger is actively charging. The green CHG LED turns on and off with the button. This button is also used to initiate and equalize charge. For more information on using the Equalize charge feature, See Section 5.2.2, and the Equalizing mode information on page 43 of the Magnum Remote Operators Manual.

MENU BUTTONS

These five buttons provide quick access to menu items that can help with configuring, monitoring, and troubleshooting your inverter/charger system.

- SHORE – This button allows you to set the appropriate breaker size for the incoming utility/shore power and is used to control the amount of AC amps the battery charger uses from the (utility/generator HOT 1 IN input) if connected. See Section 3.3.1 for more detailed information in the Magnum Remote Operators Manual.
- AGS (Auto Generator Start) - This button allows the networked Auto Generator Start (ME-AGS-N) controller to be configured to specific system preferences and enables you to check the AGS's status (when connected). Refer to section 7.0 for detailed information in the Magnum Remote Operators Manual.
- METER - This button provides meter information on the inverter/charger system. See Section 3.3.3 for more detailed information in the Magnum Remote Operators Manual.
- SETUP – This button allows the inverter/charger to be configured to your specific system preferences. See Section 3.3.4 for more detailed information in the Magnum Remote Operators Manual.
- TECH - This button allows you to access menu selections that can help service personnel with troubleshooting and allows the factory default setting to be restored. See Section 3.3.5 for more detailed information in the Magnum Remote Operators Manual.

ROTARY SELECT KNOB

This rotary SELECT knob is used to view and select various menu items and settings displayed on the LCD screen. Turn the rotary knob clockwise and counterclockwise to view different menu items and available settings. Press the SELECT knob to select/enter a menu item or to save a setting once it is displayed on the LCD screen. Press and hold the SELECT knob for 10 seconds to refresh the LCD display.

NOTICE

All adjustable inverter/charger settings in the ME-RC (except for the 08 Screen Setup settings-which revert to default) are saved in nonvolatile memory. These adjustable settings are preserved until changed, even if an inverter reset is performed or power to the remote or inverter is removed.

⚠ CAUTION

An accessory that is networked to the inverter may have adjustable settings that revert to default if all power to the inverter is lost. Refer to the owner's manual for the accessory to determine if any setting is affected.

Xantrex System Control Panel [If Equipped]**LIGHTS**

- AC In/Charge light (green) indicates qualified AC is present at the input of the inverter/charger.
- Inverter On light (green) indicates an inverter is using energy from batteries to provide AC to your appliances.
- Low Battery light (yellow) indicates that a low battery voltage condition exists in the system.
- Fault light (red) indicates a device on the network is experiencing a fault and requires user attention and intervention.

BUTTONS**Enter Button**

Confirms selection of a menu item

Displays the next screen

Up Arrow button

Scrolls up one line of text

Increases a selected value

Down Arrow button

Scroll down one line of text

Decreases a selected value

Function Button

Cancels selection of a menu item

Displays the previous screen

STBY/ON Fault Clear button puts all devices in the system into Safe mode, hold for five seconds to activate Safe mode. Press momentarily to clear active faults.

LCD Screen shows menus, settings, and system information.

CIRCUIT BREAKERS: HOUSE 110V AC

The breaker panel protects all 110V AC components in the van from either an overload on the circuit or a “short” in the wiring or component itself. When an overload or “short” develops, the breaker will open to prevent damage to the system.

Shut off the equipment (example: roof air conditioner) and allow a brief cooling period. Then reset the breaker by moving the switch to “Off” and back to “On”.

If the breaker is continually tripped and no overload is evident, have the system checked for a “short” in the wiring or the appliances.

ELECTRICAL OUTLETS: HOUSE 110V AC

Several standard 15A electrical outlets are provided throughout the van for connecting small appliances. An exterior outlet is also located on the outside on an exterior sidewall.

GROUND FAULT CIRCUIT INTERRUPTER

Bath, galley, and exterior outlets are connected to a GFCI (Ground Fault Circuit Interrupter), which is an extremely sensitive circuit breaker that will help to protect against severe electrical shock if a ground fault develops.

If such a condition occurs, the GFCI will break the circuit by turning off the power to the protected outlets. Should this occur, unplug all the appliances on that circuit and press the reset button on the GFCI equipped outlet.

If the GFCI keeps tripping, have the electrical system checked and/or repaired before using it again.

30A PANEL



All circuits and equipment in the coach area of the van are protected by either a fuse panel or breaker panel. When a circuit is overloaded or a “short” develops in any part of the system, a fuse or breaker will shut down that circuit. If this happens, turn off all affected lights or appliances and reset the breaker or replace the fuse with a new one of equal amperage rating.

NOTICE House 110V AC Circuit Breakers and House 12V DC Fuses have a label on the panel that states the amperage rating and circuit protected for each circuit breaker and fuse. Arrangement may vary according to the appliance(s) and equipment options.

HOUSE BATTERIES

AGM (Absorbed Glass Mat) Batteries

AGM type batteries designed for recreational vehicle use. They will provide longer lasting power than standard automotive starting batteries and will withstand the frequent drain-and-recharge cycles that occur under the demanding conditions of a camping trip.

The house batteries supply power to 12V DC equipment located in the living area of the van. This includes the following 12V DC powered components (if equipped): interior 12V DC lighting, propane furnace fan, freshwater pump, systems monitor panel, refrigerator, roof vent fans, and 110V DC electrical generator starter.

House batteries are automatically charged by the chassis alternator while the engine is running, when plugged into shore power, or via solar power if equipped.

Lithium Iron Phosphate Batteries [If Equipped]

12V DC Power, Long Cycle Life, High Density, High Discharge Current, High Temperature Range, Low Weight, Maintenance Free, Fast Charging, Environment Friendly.

They are usually located inside the vehicle to protect them from cold temperatures.

Lithium batteries should NOT receive a charge from the Solar Panels, Alternator, or Shore Power when the temperature inside your van is 32° Fahrenheit/0° Celsius, or colder. Always use the charging interrupt/disconnect switches provided until the van interior temperature reaches a safe level for charging.

If you are having an issue with your batteries, we recommend going to a service center.

Low Voltage Lockout

The Lithium Batteries installed in the vehicle have an internal battery management system (BMS) that protects the battery from various harmful conditions and events that can possibly occur.

One of the more common situations is the battery has locked out due to a low voltage condition. The battery will disconnect from the system when voltage drops to 9 volts. When this happens the BMS will need to be reset so the battery can be recharged.

The reset procedure requires the battery to be temporarily connected to a 12-volt source.

To do this the vehicle has been fitted with a Momentary Push Button that will

send 12 volts to the battery.

MOMENTARY PUSH BUTTON LOCATION

Equipped with a Second Alternator - Push button is on the front of the driver's seat base.

Equipped with a DC/DC Charger - Push button is in the same compartment with those components.

RESET THE BATTERY

Ensure the following settings:

- The vehicle ignition in the OFF position
- Shore power is disconnected
- 200A circuit breaker OFF
- 600 Main disconnect ON

Perform the following steps:

- Press Momentary Push Button and hold for 5-10 seconds.
- Check LinkPro battery monitor for voltage reading and is staying on.
- If the battery reset was successful, the monitor will have a voltage reading and the inverter/charger remote panel will be online.
- Immediately plug in to shore power or start the vehicle to begin recharging the battery.

NOTICE

This process may need to be repeated depending on the depth of battery discharge, the push button will need to be pressed and held for a longer period of time for battery voltage to increase to allow reset.

12V 200A Cutoff Switch

The 12V 200A Cutoff Switch lets you disconnect the house batteries from the 12V DC system of your van during storage periods to avoid battery drain by electrical items that are hooked directly to the house batteries, such as, refrigerator, clock displays and component memories, etc. Always leave this switch ON while using the van.

NOTICE

Some electronic displays and memory functions may need to be reset after power has been reconnected.

600A Master Switch

Turning off the 600A Master Switch disconnects the house batteries from all charge and discharge. The one exception is power supplied to the batteries from solar panels [If Equipped]. Solar charge power remains connected to properly maintain your house batteries. Should you wish to disconnect the solar charge you must pull the solar charge controller fuse.

Chassis Battery

Refer to chassis manufacturer's owner's manual for operating instructions, troubleshooting, and replacement procedures for the chassis battery.

BATTERY MONITOR OPTION [IF EQUIPPED]

Xantrex LinkPro [If Equipped]



The LinkPRO can measure currents up to 10,000 Amps. It selectively displays voltage, charge and discharge current, consumed amp hours, remaining battery capacity and the time remaining of your battery bank.

In order to keep your LinkPRO battery monitor delivering accurate status information about your battery, it is important to regularly synchronize your battery monitor with your battery. As explained in the quick start guide, a synchronisation step is also needed before you can actually use your battery monitor. During operation, the battery monitor automatically indicates when a synchronisation is required, by displaying the message SYNCHRONIZE.

A synchronisation step means nothing more than performing a complete charge cycle on your battery. A charge cycle will be considered complete when both Auto-sync parameters F1.0, F1.1 and F1.2 (see Function setup menu) are met

This typically means: when the battery charger switches to float mode. By meeting these conditions, the battery is considered full, which will be indicated by a flashing FULL message on the display. Besides this, the State-of-charge readout will be set to 100% and the Amp-hour readout reset to 0Ah. The FULL

message will disappear when a key is pressed, or automatically, when the battery starts discharging again.

Further information: see the manufacturers operator’s manual included in your Info Manual.

Magnum Energy ME-BMK [If Equipped]



It is a “fuel gauge” type meter for your Auxiliary Batteries. It monitors the battery bank and reports the percentage state of charge, real-time amperage, voltage, amp-hours in/out, and the minimum/maximum volts.

This unit is placed by the inverter and the readout is done by the ME-RC Inverter Controller.

NOTICE

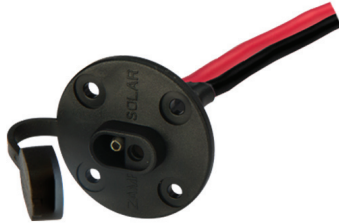
Most AGM battery manufacturers recommend not discharging below about 50% DOD (depth of discharge) to promote improved battery performance and life. Avoid allowing battery voltage to drop below about 11.5 volts, and NEVER allow the battery voltage to drop below 11.8 volts.

SOLAR PANEL(S) [IF EQUIPPED]

The roof-mounted Solar Panel uses the sun to help keep your house batteries charged. A Solar Charge Controller is located near the monitor panel to show you when the Solar Charge Panel is actively charging the house batteries.

The solar charging controller has a maximum input rating of 400 Watts. Every solar panel connected to the system needs to be accounted for, this includes all roof mounted panels and the ground level single solar port.

SINGLE SOLAR PORT [IF EQUIPPED]

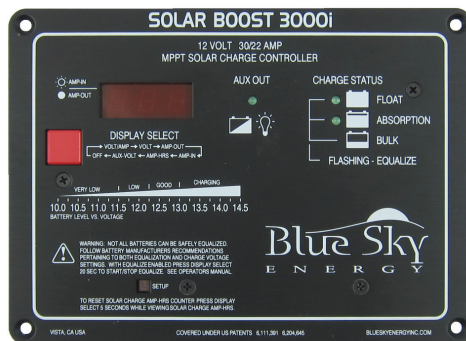


The Single Solar Port (located at ground level) is for using a portable solar panel, it has a maximum input rating of 220 Watts.

The Single Solar Port (located on an exterior sidewall) is connected to the house batteries through the solar charge controller (if equipped).

When connecting to a portable solar panel, a separate solar charge controller is not needed and will reduce the effectiveness of the portable solar panel.

SOLAR BOOST 3000i CONTROL PANEL [IF EQUIPPED]



Shows battery voltage, input/output charge current, solar charge amp hours or auxiliary output voltage. The red AMP indicator light will be solid for output current or blinking for PV input current.

Display automatically dims at night.

DISPLAY SELECT PUSH-BUTTON (RED)

Selects display mode. May also be used to clear solar charge amp-hours or start/stop Equalize.

BATTERY LEVEL GRAPHIC

Shows an approximate battery level vs battery voltage.

AUXILIARY OUTPUT LED

Indicates when the auxiliary output is ON, either charging an auxiliary battery or powering a load.

CHARGE STATUS LED'S

Shows present charge mode.

SETUP PUSH-BUTTON

Used with Display Select to view or change all setup parameters.

FRONT PANEL HEATING

Panel serves as a heatsink for power control devices and may become quite warm during normal operation.

NOTICE

The Solar Charge Panel is not intended to make the House battery system “maintenance free.” The solar panel will not completely compensate for continuous low amperage drawing from components such as the component digital displays. Although the Solar Charge Panel can help to extend battery life, the External Shore Power should be plugged in routinely to “top off” the batteries.

Further Information: Refer to the manufacturer’s user manual provided in your Info Manual for complete operating instructions.

PLUMBING

POTABLE FRESH WATER SYSTEM

 **WARNING**

Always make sure the tank is clean and sanitized before filling

 **WARNING**

Never operate the vehicle while the hose is connected to the City Water Connection.

Filling the potable freshwater tank using the City Water Connection:

Using the hose provided, connect the hose to a reliable freshwater hose connection. Connect the other end to the van at the area labeled City Water Connection, check to be sure the interior city water line valve is open (parallel to the line) and Freshwater Pump “OFF”.

Turn the water source on and the hose will fill and pressurize the water system. At this point water will be available through the sink and/or shower as it simply bypasses the freshwater tank.

To allow water to fill the tank turn the valve at the top of the freshwater tank clockwise and water will begin to fill the tank.

Watch the water level and as soon as the tank has reached your desired capacity turn the same valve at the top of the water tank counterclockwise to stop the flow of water into the tank.

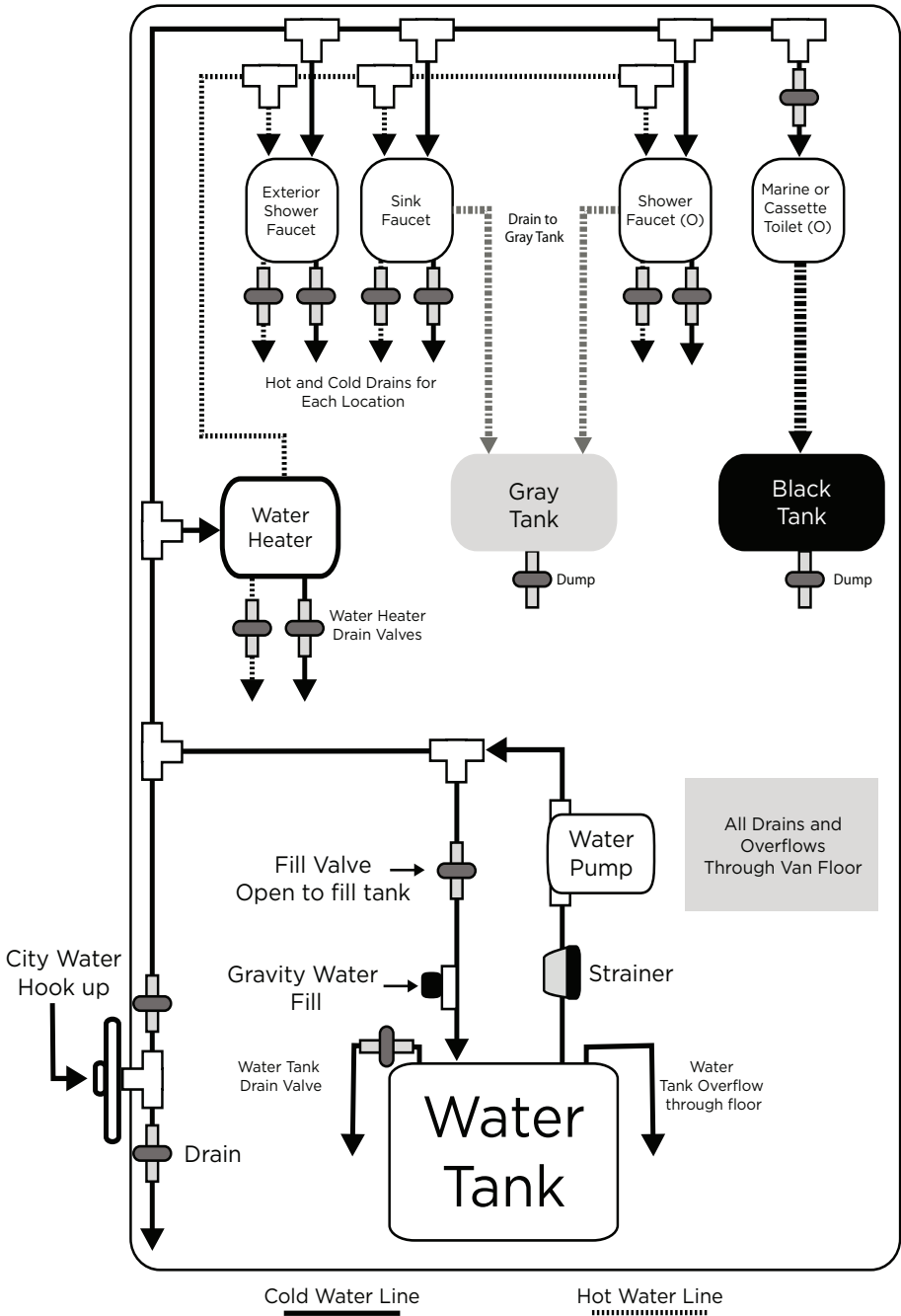
The tank also has an overflow tube to allow air to escape out of the tank. If the tank fills completely, then water will spill out of that tube under the van on the ground. If that happens the tank is full and turn the valve at the top of the tank counterclockwise to stop the flow of water into the tank.

Then turn off the water supply at the hose connection.

Finally disconnect the hose from the water source and the van.

Drain any remaining water out of the hose and safely store hose away.

PLUMBING DIAGRAM



Draining the Freshwater Tank

Turn the valve at the base of the freshwater tank counterclockwise to release the water from the tank below the van onto the ground. Turn the freshwater pump on briefly until the tank is empty.

Freshwater Pump

Your water system is a “demand” type system. When the pump switch is ON the pump will pressurize the water lines and remain in a “stand by” mode until a faucet is opened. At that time, the pump will begin pumping water. The pump will stop when the faucet is closed, or the pump switch is turned OFF.

The pump switch should be in the off position when not using the water system or when storing the van.

EXTERIOR SHOWER



The exterior shower connection is located inside at the rear of the van. It is protected by a flip-up plastic cover. The graphic reads “Off” with a blue (cold) circular arrow turning to red (hot).

Insert the male end of the shower hose and spray handle into the shower connection with the black control handle/valve pointing up. Turn the handle counterclockwise from blue (cold) to red (hot).

The freshwater pump switch needs to be turned “On” if the City Water Connection is not pressurizing the system.

When done using the shower hose and spray handle, turn off the freshwater pump switch or the City Water Connection, press the spray handle to release the remaining water pressure, and turn the black control handle/valve clockwise to remove it. Be careful to drain the remaining water from the hose before storing it away.

GRAY WATER HOLDING TANK

The gray tank can be used for a sink or a shower. Multiple gray tanks do not combine into one unit.

The tank or tanks can be drained by removing the termination end cap and pulling the drain T-valve open. This water can be drained into a park ground tank by connecting a garden hose to the termination valve end.

TOILET [IF EQUIPPED]

NOTICE

See the toilet manufacturer's user guide provided in the Info Manual for complete operating instructions, care and cleaning instructions, and safety precautions.

Porta Potti®, Cassette toilets, and Marine toilets all have different methods of operation and empty instructions.

See "Before Use" in the toilet manufacturer's user guide provided in the Info Manual for complete instructions before using the toilet.

What to Avoid

- Do not use facial tissue or regular toilet tissue in the RV toilet. These will not disintegrate sufficiently and will often cling to the sides of the holding tank. Toilet tissue made specifically for use in RV toilets and holding tanks is available at most RV supply centers.
- Do not dispose of sanitary napkins or other non-dissolving items in the toilet.
- Do not put automotive antifreeze or caustic chemicals, such as laundry bleach or heavy detergents into the toilet or holding tank as these products may damage plastic or rubber parts in the system.

See winterizing instructions at the end of this section to prepare the toilet for storage in freezing conditions.

Black Water Holding Tank for Marine Toilet

This tank can be installed under the van's floor, or inside the van depending on the floor plan.

A 10' long 3" sewer hose is supplied for the black water holding tank. A water line connects to the marine toilet for flushing.

To Empty your Black Water Holding Tank:

1. Remove the holding tank outlet cap and connect your three-inch sewer hose to the outlet of the holding tank. Extend the hose to the opening of the dump station, which is usually a hole in the ground that is slightly larger than the three-inch hose.

2. Insert the sewer hose into the dump station's hole about four to six inches down. Use the hole's cover, a brick, or something heavy to hold the sewer hose in place so it does not come out of the hole.
3. After the hose is connected and held down, Open the black tank drain T-valve. The black waste will begin to flow out and eventually it will slow, then stop. Close the black tank drain T-valve.
4. Flush and rinse the tank once more. Fill the tank to two-thirds full and then repeat the emptying process. If others are waiting to use the dump station, skip this step.
5. Recheck that the black water tank valve is closed and disconnect the sewer hose from the tank outlet. Replace the tank outlet cover. Lift the end of the sewer hose (the end you just disconnected) to completely drain the hose into the dump station. If a non-potable water hose is available, run water through the sewer hose to rinse it out. Remove the sewer hose from the dump station hold and rinse the outside of the hose, Rinse the area around the hole to ensure that any spillage has been diluted and cover the dump station hole.
6. Add water (about three flushes) to your black tank and then add the appropriate amount of holding tank treatment. If treatment is used in the gray tank, do that as well.

DRAINING/WINTERIZING THE POTABLE FRESHWATER SYSTEM

Each van is going to have various locations that water drains will drain out of the van. Depending on the configuration, the following are possible drain locations.

City Water Connection

Open the interior fill valve on the "City Water Connection".

Potable Freshwater Tank

Open drain valve next to tank that drains through the van floor.

Water Pump

Turn on, pump out tank and water heater (110V, Elwell or propane). Let pump run a few minutes until "dry."

To drain any remaining water out of the pump, remove the outlet hose on the pump. Turn the pump on. Use a rag or towel to catch water. Re-attach the pump hose.

Sink

Open the Hot and Cold water drain valves found under the sink that drain through the van floor.

Sink and Shower Faucets

Open both Hot and Cold sides of the faucets.

Exterior Shower

Open the Hot and Cold water drain valves next to the unit that drains through the van floor.

Toilet

Empty/Flush until toilet freshwater reservoir is empty.

Grey and Black Water Holding Tanks

Drain both at an approved waste disposal site.

HYDRONIC Water Heater

Open the Hot and Cold water drain valves next to unit that drains through the van floor.

Propane Water Heater

Your water heater plumbing system is equipped with a bypass kit, use it to close off the water heater, drain the water heater completely and leave the water heater closed off (out of the system) in the bypass position, particularly if you are introducing antifreeze into the plumbing system. Antifreeze can be very corrosive to the anode rod creating premature failure and heavy sediment in the tank.

See manufacturers' instructions for any changes.

To drain, turn off electrical power to water heater either at the switch from the electrical element or at breaker if equipped with 120V AC. Shut off the gas supply to the water heater. Turn off the pressure pump on the water system. Open both hot and cold faucets and remove the anode rod from the tank. Reinstall anode, be sure to coat threads with pipe dope before installing.

NOTICE

Be certain to refill the water heater with water and remove all air from tank and lines before relighting or before turning on electric power. To purge air when filling with water, open both hot and cold faucets until water runs smoothly.

Using Potable Freshwater System in Freezing Weather using "RV" Antifreeze

Water freezes at temperatures below 32°F, but the real problem of operation comes in bitterly cold temperatures. Your interior water lines, water fixtures,

water tanks, and pump assembly are normally protected from moderate freezing if there is some heat in the van.

“RV” antifreeze is available at “RV” stores, Good Sam’s, Camping World, etc., to prevent freezing of the water system. Always follow the manufacturer’s instructions.

WARNING

NEVER use “Automotive” antifreeze/coolant in your RV water system. “Automotive” coolant/antifreeze contains ethylene glycol which, if ingested, can cause blindness and can be fatal.

Pour RV antifreeze in the freshwater tank, turn on the water pump, and open the cold side of faucet until you see antifreeze, then open hot side until you see antifreeze. If you have a shower or marine toilet, run those until you see antifreeze. Water tank, lines and holding tanks are protected.

If equipped with a macerator pump, open termination valves to allow antifreeze into pump, run pump for a few seconds until antifreeze comes out.

Toilet— see manufacturer’s literature.

Water heater — do not run RV antifreeze into the water heater. Use the bypass valve installed with the heater to prevent this.

Pour RV antifreeze into your sink and shower to flow into your gray water holding tank to help protect it. This will also protect your drain trap (P-trap). If you have a marine toilet, pour RV antifreeze into the toilet and flush into the black water holding tank.

Under moderate subfreezing conditions, antifreeze is recommended in the black and gray waste holding tanks. Antifreeze should be used at a 50% water and 50% antifreeze ratio, always follow directions on container.

Other items not included here — see manufacturer’s literature.

To de-winterize, always follow the instructions on the “RV” antifreeze container.

DISINFECTING THE POTABLE WATER SYSTEM

The following is from the NFPA 1192-Annex A, Explanatory Material, A.7.3.7.5.

To assure complete disinfection of your potable water system, it is recommended that the following procedures be followed on a new system, one that has not been used for a period, or one that may have become contaminated. This procedure is also recommended before long periods of storage such as over winter.

1. Prepare a chlorine solution using 1-gallon of water and 1/4 cup of household bleach (sodium hypochlorite solution). With tank empty, pour chlorine solution into the tank. Use 1-gallon solution for each 15 gallons of tank

capacity. This procedure will result in a residual chlorine concentration of 50-ppm in the water system. If a 100-ppm concentration is required as discussed in item 3, use 1/2 cup of household bleach with 1 gallon of water to prepare the chlorine solution. One gallon of the solution is used for each 15 gallons of tank capacity.

2. Complete filling of tank with potable water. Open each faucet and run the water until a distinct odor of chlorine can be detected in the water discharged. Do not forget the hot water taps.
3. Allow the system to stand for at least 4 hours when disinfecting with 50-ppm residual chlorine. If a shorter period is desired, then a 100-ppm chlorine concentration needs to be permitted to stand in the system for at least 1 hour.
4. Drain and flush with fresh potable water.

POP TOP [IF EQUIPPED]

WARNING

Always be on a level surface when raising or lowering your top.

WARNING

Check surroundings before raising your top to make sure of adequate clearance.

WARNING

Ensure the total weight of items on the roof including racks, solar, and gear does not exceed 150 lbs if you will be raising your top.

WARNING

Be careful climbing in and out of the bed. Use extreme care as a fall can cause serious injury. Follow instructions when using a ladder or stool to reach the bed.

WARNING

Never drive with your top raised. Always make sure top is down and latches are closed before driving. Failure to do so can damage the top.

RAISING THE TOP

- Park the van on a level surface.
- Locate the three latching mechanisms with two in the front and one in the rear.
- Remove the safety push-pins from the latching mechanism.
- Pull back on the latch handles, release the safety clips, and remove them from the hooks from the retaining ring. Make sure the latch hooks are clear of the retaining ring before raising the top.
- Press and hold the pop top switch in the “up” position. The electric motors will begin to raise the top. Hold this switch in until top is completely raised. The lift mechanism motors will stop once the top is completely raised.

LOWERING THE TOP

- Roll up and secure all attached curtains and remove any loose items from the bed areas that would prevent the top from lowering completely.
- Zip closed all screens and windows. Zippers must be closed to prevent water from entering your van while driving in rainy conditions.

- Open a van door or window to allow for the air volume in to top to escape and for the canvas to settle properly.
- Press and hold the electric pop top switch in the “down” position until the top is approximately halfway down. At this time check that the canvas material is free and clear of pinching and/or binding.
- Press and hold the pop top electric switch until the top is nearly seated. Check that no canvas material is trapped under the edges of the pop top and adjust if needed. Once confirmed, then lower the top completely.
- Engage all three latch hooks to the retaining rings, snap latches closed and insert the safety push-pins.

USING THE BED

The bed can be unhooked before raising the top or can be manually lowered from the top when it is in the up position. To lower the bed, unhook the rear cable loop first and lower the rear part of the bed onto the rails. Then unhook the front two cable loops and lower the front part of the bed onto the rails. Slide the mattress back so all the cushions are pressed against the rear of the top rails.

Use the ladder to climb into the bed. Secure the ladder to the bed by looping the supplied Velcro strap to the bed handle.

TROUBLESHOOTING

Power Top Does Not Operate

Items to check if pop top does not raise or lower.

- Ensure 12V battery system has power. Voltage should be above 12V.
- Check the 12V fuse for the pop top actuators. Typically, this is located under the driver’s side 30A fuse in the 30A panel.
- Check the switch and ensure all wires are connected properly.
- If these steps do not work, contact service for further instructions.

Maintenance for Pop Top

The top can settle over time. Turning the threaded J-hook on the latches will adjust the tension to make sure the top is latched securely.

The canvas side walls should be washed with warm soapy water. The sidewalls are mold resistant. If mold should appear mix 50 parts water to 1 part bleach, apply to the walls and wait 30 minutes and then wash off.

The pop top shells are painted with a raptor liner paint. Washing with warm soapy water should clean them sufficiently. A UV protectant can be reapplied to the top when needed. Be careful after it is applied as the top can be slippery.

The rubber seal around the bottom of the fiberglass shell can be sprayed with silicon or other similar vehicle rubber treatment to keep it from drying out.

The top of the van where the pop top rests when lowered needs to be cleaned and maintained after each use.

ACCESSORIES

POWER ROOF VENT [IF EQUIPPED]

The Power Roof Vent (or Attic Fan) features a rain cover, electric lift, and thermostat operation with intake or exhaust airflow. The vent fan is controlled by a remote, or keypad controls.

NOTICE

In the event of power failure, the ventilator dome may be opened or closed manually using the Dome Crank knob.

Power Roof Vent Operation

ON/OFF:

Use this button to start the fan or to turn off the fan. On Automatic Opening Models the lid will also open or close when the fan is turned on or off. On Manual Opening Models pushing this button while in Auto Mode will exit Auto Mode, turn off the fan and the lid will stay in the position you selected. On Automatic Opening Models this button will exit Auto mode, turn the fan off, and close the lid.

IN/OUT:

Use this button to reverse the direction of the fan, the fan will slow down and pause for two (2) seconds before resuming operation in the opposite direction. Note: In Auto Mode the fan direction is automatically positioned to Exhaust. It may be overridden and changed to Intake by depressing this key. PLEASE

NOTE: THIS KEY HAS BEEN REMOVED ON EXHAUST ONLY MODELS

AUTO:

Auto Mode allows the thermostat to turn the fan ON and OFF depending on the thermostat setting. Press this button once for less than three (3) seconds to enter Auto Mode, three (3) quick beeps will confirm the MAXXFAN has entered Auto Mode. To EXIT Auto Mode, press the ON/OFF key. Initial factory set point for the thermostat is 78°F. The green LED will light to indicate the MAXXFAN is in Auto Mode. To adjust, follow instructions below: If no previous thermostat temperature was entered, or you wish to change a previous set

temperature, press the HOLD TO SET key for more than 3 seconds and you will hear one long beep and the thermostat will be reset to 78°F. To further adjust the set temperature, if desired, use the (+) or (-) Arrow keys to adjust at 1°F per press. The fan will emit a beeping sound to confirm this setting. If a previous thermostat temperature was entered, the fan will remember this temperature setting and the next time you enter Auto Mode, the fan will start ventilating automatically as directed by the thermostat. The fan speed will automatically adjust based on the cabin temperature. As cabin temperature rises, the fan increases in speed. Note: If 12V RV power is removed from the MAXXFAN, the thermostat will be reset to 78°F.

ARROW

When in Auto Mode: Use the (+) & (-) Arrow keys to adjust the thermostat set temperature up or down by 1°F per press. When in Manual Mode: Use the (+) & (-) Arrow keys to adjust the fan speed up or down. When the fan speed reaches either the maximum or minimum speed, the fan will respond with 2 quick beeps to indicate this. **ARROW KEYS PRESSED TOGETHER:** Automatic Lift Models Only Press the (+) & (-) Arrow keys at the same time to Open or Close the lid. The fan motor will remain in its current state.

RAIN SENSOR:

Automatic Opening Models Only Press this key to turn the Rain Sensor OFF. This will deactivate the Rain Sensor. The red LED will light to indicate that the Rain Sensor is deactivated. Use caution when deactivating the Rain Sensor as rain could enter your RV. If the Rain Sensor circuit detects rain, it will turn off the fan and close the lid. The red LED will blink to indicate that the Rain Sensor has shut the fan off. Press the Rain Sensor key again to reset the fan and extinguish the blinking LED. Note: CAUTION, the Rain Sensor will not close the MAXXFAN lid if the lid is opened manually with the knob.

MAXXFAN® Model 4500K/7500K [IF EQUIPPED]

FAN ON & POWER OFF

Press this button: • To start the fan • To turn the fan off • To exit Auto Mode

VENT LID POSITION

Press this button to open or close the vent lid. While the fan is running in Manual Mode press once to close the vent lid and enter “Ceiling Fan” Mode. NOTE: This button is not active in Auto Mode. If the fan loses 12V RV power or power is removed from the fan, use the knob located at the ceiling to manually open or close the vent lid if desired.

AIR EXHAUST/INTAKE

Press this button to reverse the fan from intake or exhaust

NOTE: In Auto Mode, the fan direction is automatically positioned to Exhaust, but may be overridden and changed to Intake by depressing this key.

FAN AUTO MODE - Press this button to enter Auto Mode • Auto Mode allows the fan lid to automatically open and the fan motor to operate as dictated by the thermostat set point temperature. Once the cabin temperature cools and reaches the set point temperature, the fan lid will close and the fan motor will shut off. • Pressing this button while in Auto Mode will shut off Auto Mode, close the vent lid and shut off the fan motor.

THERMOSTAT SET TEMPERATURE

Press Plus (+) button to increase the Set Temperature for Auto Mode. Press Minus (-) button to decrease the Set Temperature for Auto Mode.

NOTE: The thermostat ranges is from 29°F to 99°F or -2°C to 37°C. To change from Fahrenheit to Celsius on the temperature display, press and hold both set temperature keys simultaneously.

FAN SPEED

Press Plus (+) button to increase the fan speed. Press Minus (-) button to decrease the fan speed. The fan has ten speeds.

NOTE: When the fan speed reaches either the maximum or minimum speed, the fan will respond with 2 quick beep sounds to indicate this.

LOW BATTERY INDICATOR

When the battery is at full charge, three black power bars are displayed. • One or zero power bars displayed indicates the batteries need replacement.

TRANSMISSION SIGNAL

This symbol is displayed on the screen when any button is pressed to indicate the signal was transmitted to the fan. A beep sound from the ceiling unit indicates the signal from the remote control was received by the fan.



AWNING [IF EQUIPPED]

Manual Operation – Hand crank wand provided.

- To avoid unnecessary strain on the awning as well as the van side, we suggest taking out the legs at about 1 meter/40 inches from the opening.
- Grasp the leg near its hinge-joint and pull it toward you. The foot for the legs has been created to prevent the incorrect placement inside the housing of the lead bar during the closing phase of the awning. With an incorrect placement of the foot the lead bar will not close completely; so, we advise you to always put it into the housing properly with the base turned toward the lead bar.
- Unhook the legs from the lead bar.
- Lower the legs to ground level to support the awning.
- After unrolling the awning completely, adjust the legs to the chosen height.
- To avoid that the awning is lifted by an unexpected gust of wind, it is necessary to secure the legs to the ground with the hooks provided. For safety's sake, we strongly advise you also use some storm cords in the upper part of each support leg or anchor the awning with optional Tie-Down Kit straps.

Optional: If you want to fasten the support legs to the van, put the terminals into the wall brackets. The brackets can be fixed only on reinforced points.

Make sure that the awning perfectly rolls up: when it is, the red indicators in the front profile ends are no longer visible. Before leaving, make sure the awning is correctly closed.

WARNING

A damaged fabric does not allow the awning to perfectly roll up. Never use the awning with a damaged canopy.

WARNING

We remind you that the awning is designed to protect from the sun, and not from rain, wind, or snow. In these cases, we recommend rolling it up. Otherwise, please take the following precautions: lower one side of your awning, so that water can flow away and place the optional tension rafter temporarily for support. (Not included for all awning lengths.).

WARNING

Never leave the awning unattended. Wind gusts can rip the awning off the van.

Wash the canopy with light cleaning detergent.

LADDER [IF EQUIPPED]

WARNING

STAY OFF ROOF. Surface may be slippery. Falling could result in death or serious injury.

Your van may be supplied with a Ladder mounted on the Driver or Passenger side. The ladder on your van is provided for limited access to the roof. Walking or working on the roof should be left up to qualified service personnel using proper safety equipment in a safe environment. You should only walk or work on the roof if you are qualified and have created a safe environment. For your safety, it is not recommended that you store or carry items directly on the roof.

Before Using the Ladder

- Inspect the ladder to make sure it is not damaged. Never use a damaged ladder.
- Keep the rungs of the ladder clean and dry while in use. Never use the ladder when it is raining, snowing or icy. The rungs can become slippery. Do not step onto the rungs if the rungs are wet, or if your shoes are wet or carry mud or debris that could result in a loss of footing.

WARNING

Do not exceed 225 lbs. maximum weight capacity. Misuse of the ladder could result in death or serious injury.

- Maximum Capacity: 225 lbs.
- Do not overload it. Ladder is intended for one person.
- Make sure you are physically capable of safely using the ladder. Strength, flexibility, and stability are required.
- Be aware that the van may sway as you climb the ladder. Do not use the ladder in high winds.
- As you climb the ladder, grasp the side rails firmly and always use both hands. Keep your body centered between the side rails. Do not over-reach.
- Never allow children on the ladder.
- Do not transport items anchored to the ladder. You could damage the ladder.

SEATING

MAKING SEATS INTO BEDS

Dinette

- Release the back cushion retainer straps for the back cushion and leave it on top of the lower cushion
- Raise the lower seat cushion and slide it out towards the middle of the van.
- Drop the back cushion into place behind the seat cushion
- Repeat for the other side of the van.
- Bring the two seat cushions together and create an A-Frame with the cushions.
- Push down the center of the A-Frame to push everything against that walls. This will put tension on the bed and level out for sleeping.
- To unmake the bed, reverse the process.

Sofa/Couch

- To lay flat: Lift up from the lower seat. While lifting up, pull the seat forward
- To make a seat: Lift up from the lower seat. While lifting up, grab the back cushion and pull toward you. This will lower the lower seat.

Gaicho

- Flip the tabs on either side of the seat open.
- Pull the seat back towards the middle of the van.
- Open the support legs on either end of the seat back and lock them out.
- Continue moving the seat back to level with the seat base to make the bed.
- Reverse the process to make into a seat.
- Couch/Sofa
- Pull up from the seat base.
- About halfway up, begin to pull the seat forward.
- The rear should fall back into place.
- To make back into a seat, lift the front of the seat up, then pull the back forward.

